

**REMARKS**

Claims 1–18 are pending in this application. Non-elected claims 5–9, 11–13, 17, and 18 have been withdrawn from consideration. By this Amendment, claim 1 is amended. No new matter is added.

In view of the foregoing amendments and following remarks, reconsideration and allowance are respectfully requested.

**I. Rejections Under 35 U.S.C §102/§103**

**A. Yasuda**

The Office Action rejects claims 1–4, 10, and 14–16 under 35 U.S.C. §102(b) as being anticipated by or, in the alternative, under 35 U.S.C. §103(a) as obvious over EP 0 849 817 A2 to Yasuda et al. ("Yasuda"). Applicants respectfully traverse the rejection.

By this amendment, claim 1 is amended to remove the recitation of a Li-Ni-Co-O system component. Therefore, claim 1 requires "a Li-Ni-Co-Ba-O system component as a main component." Yasuda fails to teach or suggest a system component as required by claim 1 that contains the element Ba.

Yasuda does not anticipate, and would not have rendered obvious claim 1. Claims 2–4, 10, and 14–16 variously depend from claim 1 and, thus, also are not anticipated by and would not have been rendered obvious by Yasuda. Accordingly, reconsideration and withdrawal of the rejection are respectfully requested.

**B. Kamauchi**

The Office Action rejects claims 1–4, 10, and 14–16 under 35 U.S.C. §102(b) as being anticipated by or, in the alternative, under 35 U.S.C. §103(a) as obvious over JP A 06–275277 to Kamauchi et al. ("Kamauchi"). Applicants respectfully traverse the rejection.

By this amendment, claim 1 is amended to remove the recitation of a Li-Ni-Co-O system component. Therefore, claim 1 requires "a Li-Ni-Co-Ba-O system component as a

main component." Kamauchi fails to teach or suggest a system component as required by claim 1 that contains the element Ba.

Kamauchi does not anticipate, and would not have rendered obvious claim 1. Claims 2-4, 10, and 14-16 variously depend from claim 1 and, thus, also are not anticipated by and would not have been rendered obvious by Kamauchi. Accordingly, reconsideration and withdrawal of the rejection are respectfully requested.

**C. AAPA**

The Office Action rejects claims 1-4, 10, and 14-16 under 35 U.S.C. §102(b) as being anticipated by or, in the alternative, under 35 U.S.C. §103(a) as obvious over Applicant's Admission of Prior Art ("AAPA"). Applicants respectfully traverse the rejection.

Claim 1 is directed to a positive electrode material powder for a lithium secondary battery containing a Li-Ni-Co-Ba-O system component as a main component, wherein each particle which constitutes the powder has an amorphous phase of an oxide. Such a positive electrode material powder is not disclosed, taught, or suggested by AAPA.

The Office Action asserts that the AAPA describes positive electrode material powders containing a Li-Ni-Co-Ba-O system component. However, the AAPA does not teach or suggest that "each particle which constitutes the powder has an amorphous phase of an oxide" as claimed. To overcome this deficiency, the Office Action argues that "since the positive electrode material of the AAPA includes Ba in the same number of moles or molar range which allows easy formation of an amorphous phase of the oxide, it is contended that the presence of an amorphous phase of the oxide, as well as the specific particle dispersion and/or phase formation the surface of the particle are inherent to the specific composition of the positive active material of the AAPA." See Office Action at page 8, lines 14-18. Applicants respectfully disagree, at least because the Office Action's rationale and conclusion are incorrect.

First, the rationale in the Office Action that "since the positive electrode material of the AAPA includes Ba in the same number of moles or molar range which allows easy formation of an amorphous phase of the oxide," is misplaced. The Office Action implies that the AAPA teaches that inclusion of Ba in particular amounts allows easy formation of an amorphous phase of the oxide. However, that teaching in fact only comes from the present disclosure, not the AAPA. See, in particular, page 4, last full paragraph of the specification, cited in the Office Action. That paragraph, however, appears in Applicants' own "Summary of the Invention" and not as any alleged teaching of the AAPA.

The Office Action's reliance on Applicants' own disclosure is misplaced. It has been clearly held that the reason, suggestion or motivation for modifying or combining references "can not come from the applicant's invention itself." In re Oetiker, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). That is, the motivation for modifying or combining references can not be a product of hindsight reconstruction of the claimed invention based on applicant's own disclosure. Here, the AAPA does not provide any motivation for each particle specifically having an amorphous phase of an oxide, as claimed. The only motivation for modifying the AAPA to reach the claimed invention derives from the disclosure of the present application, which is clearly improper.

Moreover, the AAPA is completely silent with respect to whether the particles have an amorphous phase of an oxide or not. In fact, in the conventional art, whether an amorphous phase is present or not was not taken into account by the AAPA. Thus, it would not have been obvious for one of ordinary skill in the art at the time the invention was made to have made a Li-Ni-Co-Ba-O system component having an amorphous phase of an oxide in any form.

Second, the conclusion in the Office Action that "it is contended that the presence of an amorphous phase of the oxide, as well as the specific particle dispersion and/or phase

formation the surface of the particle are inherent to the specific composition of the positive active material of the AAPA" is incorrect as a matter of law.

In order for prior art to anticipate a claimed invention on the ground that a limitation is inherently disclosed in the reference, the inherency must be certain. The fact that a prior art reference may have the characteristics of the claimed product is not sufficient. Inherency must be a necessary result and not merely a possible result; the mere fact that a certain thing may result from a given set of circumstances is not enough. In re Oelrich, 666 F.2d 578, 581, 212 USPQ 323, 326 (CCPA 1981); Ex parte Keith and Turnquest, 154 USPQ 320, 321 (Pat. Off. Bd. App. 1966). Likewise, in order to establish a prima facie case based on inherency, it is incumbent on the Patent Office to establish this asserted inherency. See In re King, 231 U.S.P.Q. 136 (Fed. Cir. 1986). The Office Action must provide a basis in fact and/or technical reasoning to reasonably support the assertions that the allegedly inherent characteristic of the particles necessarily flows from the teachings of the AAPA. See Ex parte Levy, 17 USPQ2d 1461, 1464 (PTO Bd. Appl. & Int. 1990).

Accordingly, the Office Action must provide some evidence or scientific reasoning to establish the reasonableness of the Examiner's belief that the limitation is an inherent characteristic of the AAPA, or that the AAPA particles necessarily achieve the asserted amorphous phase. The Office Action has failed to meet this burden. In the present case, it cannot be said that an amorphous phase and dispersion thereof are inherent properties to the particles, and this principle would be readily acknowledged by those of ordinary skill in the art. The reason is, for example, that these properties may vary depending on the kind of raw material used, and the type of production method.

The specification specifically demonstrates that these properties in fact are not inherent in all particles. The specification describes that simply adding Ba into an Li-Ni-Co-Ba-O system material does not generate an amorphous phase of an oxide in the composition.

Instead, the amorphous phase is generated by the specific methods employed to produce the composition. For example, in order to produce an amorphous phase of an oxide within a particle entails mixing Ba with a Li-Ni-Co-Ba-O system raw material, and firing the mixture. *See* specification, page 5, last paragraph. Or, to produce an amorphous phase of an oxide at a surface of each particle entails firing a Li-Ni-Co-Ba-O system raw material, adding Ba to the fired mixture, and then refiring the mixture. *See* specification, page 6, first paragraph. Or, to produce an amorphous phase of an oxide within and at a surface of each particle entails mixing Ba with a Li-Ni-Co-Ba-O system raw material, firing the mixture, adding Ba to the fired mixture, and then refiring the mixture. *See* specification, page 6, second paragraph. Accordingly, the claimed properties are not inherent in the particles of the AAPA.

For at least these reasons, AAPA does not anticipate, and would not have rendered obvious claim 1. Claims 2–4, 10, and 14–16 variously depend from claim 1 and, thus, also are not anticipated by and would not have been rendered obvious by AAPA. Accordingly, reconsideration and withdrawal of the rejection are respectfully requested.

**D. Kobayashi**

The Office Action rejects claims 1–4, 10, and 14–16 under 35 U.S.C. §102(b) as being anticipated by or, in the alternative, under 35 U.S.C. §103(a) as obvious over U.S. Patent Application No. 2002/0055041 A1 to Kobayashi et al. ("Kobayashi"). Applicants respectfully traverse the rejection.

By this amendment, claim 1 is amended to remove the recitation of a Li-Ni-Co-O system component. Therefore, claim 1 requires "[a] positive electrode material powder for a lithium secondary battery containing a Li-Ni-Co-Ba-O system component as a main component, wherein each particle which constitutes the powder has an amorphous phase of an oxide." Despite its asserted teachings, Kobayashi fails to teach or suggest a *positive electrode material powder* containing the element Ba.

Kobayashi does not anticipate, and would not have rendered obvious claim 1. Claims 2-4, 10, and 14-16 variously depend from claim 1 and, thus, also are not anticipated by and would not have been rendered obvious by Kobayashi. Accordingly, reconsideration and withdrawal of the rejection are respectfully requested.

**II. Conclusion**

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 1-4, 10, and 14-16 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,

  
James A. Oliff  
Registration No. 27,075

Joel S. Armstrong  
Registration No. 36,430

JAO:JSA

Attachment:  
Petition for Extension of Time

Date: April 12, 2007

**OLIFF & BERRIDGE, PLC**  
**P.O. Box 19928**  
**Alexandria, Virginia 22320**  
**Telephone: (703) 836-6400**

<p><b>DEPOSIT ACCOUNT USE AUTHORIZATION</b> Please grant any extension necessary for entry; Charge any fee due to our Deposit Account No. 15-0461</p>
---